# SINGHEALTH DUKE-NUS EDUCATION CONFERENCE

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# THE OBSTETRIC ANAESTHESIA REFLECTIVE PROGRAM STIMULATED CLINICAL & COGNITIVE LEARNING IN ANAESTHESIOLOGY RESIDENTS

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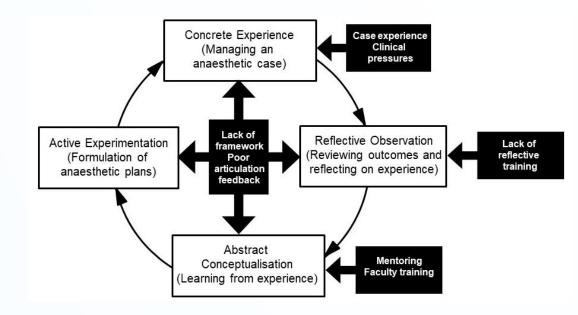
## Introduction

#### **Our Educational Challenges**

- Our residents demonstrated low levels of reflective learning<sup>1</sup> despite deliberate experiential training
- They seldom reviewed their own performances & struggled to build new knowledge from previous clinical experiences
- There were faculty concerns of them 'emulating' actions without cognitive reasoning

### **Exploration of the Barriers Using Kolb's Cycle<sup>2</sup>**

- Four barriers identified [thematic analysis] in focus groups:
  - (1) lack of cognitive framework
  - (2) lack of training
  - (3) association with medical errors
  - (4) lack of feedback & validation of residents' learning



# **Research Findings**

#### **Research Purpose and Questions**

- Purpose: To find out the utility of the program in instilling reflective learning & practice
- Question: How did the reflective learning program influence the learning of the junior residents?

#### **Methods**

- Constructivist approach, qualitative exploration with focus & individual interviews using semi-structured interview format
- Iterative data gathering & saturation, coding & themes
- 19 junior residents participated in the pre-post program interviews

#### **Results**

#### "Now for each case, there's learning that I can reflect on"

- Facilitated the cognitive framework for completion of the experiential learning cycle
- Stimulated critical reflection & constructive learning
- Utilised reflective practice in crafting alternative plans

"With the diary, you have a deeper depth of the situation."

# **The Reflective Learning Program**



#### **Purpose of the Program**

- To stimulate reflective learning using triggers from good practices & experiences rather than medical errors
- To provide a cognitive model<sup>3</sup> for the residents & faculty to 'complete an experiential learning & teaching cycle'
- To focus on the development of 'Professionalism, Communications, Practice & Systems-based Learning'
- To provide a platform for feedback, validation & mentoring

#### **Sample Questions: My 1<sup>st</sup> Epidural Insertion**

- "Describe how you felt after the epidural insertion."
- "How did you think your patient feel?"
- "How would you do better the next time round?"
- "How did you think your supervising faculty feel?"

"Strengthen the reasoning why we do certain things.

- Crystallized clinical & cognitive learning points
- Committed to deeper learning and memory
- Learning cycle stimulated looking back and increased awareness of shortcomings
- Stimulated the creation of plans for improvement

"It was impactful. For the first time, I was asked about the encounter and how the patient felt."

- Recognised the importance of putting the patient first
- Increased sensitivity to patient's needs and empathy
- Increased awareness of other stakeholders' needs
- Improved communication & interprofessional collaborations
- Refined clinical practice through improved methods

#### **Discussions & Conclusions**

- Simple, resource-appropriate platform to stimulate reflective learning and deep learning<sup>4</sup>
- Structured reflection is important
- Critical reflection leads on to setting of goals
- Mentor guidance and affirmation of reflection are necessary

#### References

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- 4. Bransford J. How people learn. Washington, DC: National Acad. Press, 2004.

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